Myshkis A.V.

USSR/Chemistry - Rubber

FD-2639

Card 1/1   Pub. 50-4/18

Author   : Myshkis, A. V.

Title   : An attempt at the setting of time standards to be applied in the
               pressure vulcanization of rubber products

Periodical : Khim. prom. No 3, 141-144, Apr-May 1955

Abstract   : Describes time studies carried out at the "Kauchuk" Rubber Plant.
               Four graphs, 6 tables.

Institution : "Kauchuk" Rubber Plant

AUTHORS: Zaytsev, I. I. and Myshkis, A. V.   SOV/138-58-4-6/13

TITLE: Some Ways of Increasing the Output of Moulded Articles
             From Vulcanisation Presses. (Uvelicheniye s"yema
             formovykh izdeliy s vulkanizatsionnykh pressov).

PERIODICAL: Kauchuk i Rezina, 1958, Nr.4. pp. 20 - 26. (USSR).

ABSTRACT: A very detailed criticism of an article by B. M. Gorelik
             and A. V. Ratner which appeared under the same title
             in "Kauchuk i Rezina", 1957, No.1. There are 2 Tables,
             and 3 Figures.

ASSOCIATION: Research Institute of Rubber and Latex Goods.
             (Nauchno-issledovatel'skiy institut rezinovykh i
             lateksnykh izdeliy).

Card 1/1   1. Rubber materials--Production   2. Presses--Operation

ZAITSEV,Ivan Ivanovich; MYSHKIS, Abram Veniaminovich; POGOSTIN,S.Z.,
spets.red.; MAKAROVA, red.; RAKOV,S.I., tekhn.red.

[Establishing technical standards in the rubber industry]
Tekhnicheskoe normirovanie truda v rezinovoi promyshlen-
nosti. [Moskva] Izd-vo VTsSPS Profizdat. 1960. 205 p.
(MIRA 14:5)

(Rubber industry—Production standards)

MYSHKIS, A.

Ways of reducing the labor expended in moving loads in rubber
industry plants. Biul.nauch. inform.:trud i zar. plata 4
no.4:13-18 '61.   (MIRA 14:6)
              (Moscow—Rubber industry)
              (Materials handling)

MYSHKIS, A.V.

Economic effectiveness of complex mechanization of loading and un-
loading in the rubber industry. Kauch.i rez. 21 no.7:39-46 Jl '62.
(MIRA 15:7)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.
          (Rubber industry—Equipment and supplies)
               (Loading and unloading)

MYSHKIS, A.V.; SHAKH, A.D.

Economic efficiency of the mechanization of the manufacture of
shaped rubber goods for engineering purposes. Kauch.i rez. 22
no.1:42-48 Ja '63.   (MIRA 16:6)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti i
Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
Lomonosova.

                              (Rubber industry)

SHAKH, A.D.; MYSHKIS, A.V.

Functional structure of labor expenditure in the manufacture of industrial rubber goods. Kauch. i rez. 23 no.1:40-45 Ja '64.   (MIRA 17:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova i Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

myshkis, m I

MYSHKO, D. I.

Russia - History

Victory of the Russian and Ukrainian peoples over the Turko-Tataric invaders in 1677-1678. Visnyk AN URSR 24 no. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

MYSHKO, D.

[Kiev; a guidebook] Kiev; spravochnik-putevoditel'. Kiev, Gospolit-
izdat USSR, 1954. 285 p.   (MLRA 8:1D)

MYSHKO, Dmitriy Ivanovich; IGNATKIN, Ivan Aleksandrovich; LYSENKO, Nikolay Nikolayevich; MOSENZON, I., red.; LAPCHENKO, K., tekhn.red.

[Kiev; a reference manual and guidebook] Kyiv; putivnyk-dovidnyk. Kyiv, Derzh. vyd-vo polit.lit-ry URSR, 1958. 398 p. (MIRA 11:12)
(Kiev--Description--Guidebooks)

IGNATKIN, Ivan Aleksandrovich [Ihnatkyn, Ivan Aleksandrovich];
    LYSENKO, Nikolay Nikolayevich; MYSHKO, Dmitriy Ivanovich;
    MOSENZOI., I., red.; MEYEROVICH, S., tekhn. red.

[Kiev; guide and reference book] Kiev; putevoditel'-
spravochnik. Kiev, Gos. izd-vo polit. lit-ry USSR, 1962.
349 p.   (MIRA 15:4)
            (Kiev--Guidebooks)

MYSHKC, Z. A.

MYS KC, Z. A. - "Areas of burning coal seams in the Kuzbass and seeking them out with
geophysical methods." Tomsk, 1956. Min Higher Education USSR, Tomsk Order of
Labor Red Banner Polytechnic Inst imeni S. M. Kirov. (Dissertations for degree
of Candidate of Geologicomineralogical Sciences.)

SC: Knizhnaya letopis', No 48. 26 November 1955. Moscow.

ACCESSION NR: AT4016828   S/2604/63/000/048/0083/0086

AUTHOR: My*shko, Z. A.

TITLE: Determining the direction of magnetization on the basis of magnetic anomalies

SOURCE: Moscow. Vsesoyuzny*y nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki. Razvedochnaya i promy*slovaya geofizika (Prospecting and industrial geophysics), no. 48, 1963, 83-86

TOPIC TAGS: magnetic anomaly, magnetization, prospecting, magnetism, magnetic vector

ABSTRACT: D. S. Mikov derived a relationship between the angle of deviation of the magnetic vector of plane figures from the vertical and the ratio of areas limited by a curve z and axis x:

$$\sin\gamma = -2\,\frac{Z_-}{Z_+} - 1$$

where Z_- is the maximum negative area and Z_+ is the positive area. This relationship was used in the Kuznetsk coal fields (see Fig. 1 of the Enclosure). The results showed that the convergence of the magnetic angle of the investigated samples

Card   1/3

ACCESSION NR: AT4016828

and the anomaly curve is good and in several cases the magnetic angle may be
found without special sample selection,(which requires a long time and high cost).
Orig. art. has: 14 formulas and 3 figures.

ASSOCIATION: Vsesoyuzny*y nauchno-issledovatel'skiy institut geofizicheskikh
metodov razvedki, Moscow (All-Union Scientific-Research Institute of Geophysical
Prospecting)

SUBMITTED: 00

SUB CODE: EM

DATE ACQ: 13Feb64

NO REF SOV: 001

ENCL: 01
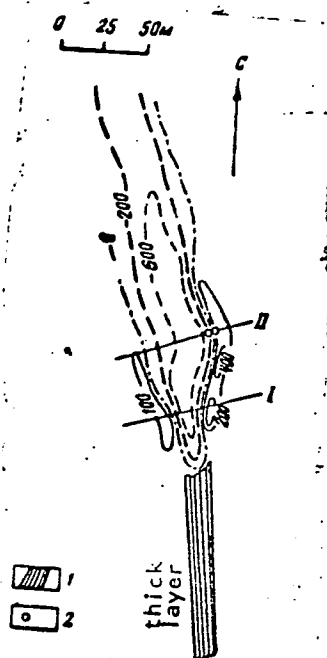
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Card   2/3

ACCESSION NR: AT4016828

ENCLOSURE: 01

Schematic plan of isodynamic lines above burned out coal layer
1 - coal layer; 2 - mine development

Card   3/3

G/014/61/000/004/005/005
D030/D109

AUTHORS: Klekovkin, G.P., Engineer, Lecturer of Technical Sciences,
Ulmann, I.E., Chief Engineer, Myshkov, K.N., and Antonovich,
V.I.

TITLE: Automatic set for impulse arc (vibrocontact-) built-up
welding, Model KUMA-5M

PERIODICAL: Schweisstechnik, no. 4, 1961, 184-185

TEXT: The authors describe the set in detail and point out that it is used
for repairing worn machine parts. It permits a weld-up layer of a thick-
ness of 0.5 - 0.3 mm at a hardness up to 65 Rc. Compared with other welding
heads for vibration arc built-up welding, "KUMA-5M" has the following ad-
vantages: stable welding process, low electrode wire loss, low consumption
of carbon and manganese, increased hardness (up to 65 Rc) of the deposit,
less difference in hardness of deposit (45-65 Rc), more uniform composition
of deposit, reduction of porosity, increased density, possibility of built-
up welding of crankshafts by means of a special device, angle of welding

Card 1/2

Automatic set for impulse arc ....

G/014/61/000/004/005/005
D030/D109

head to material to be welded can be set at will, small size of welding set, noiseless operation. The author gives the following technical data of the welding set: 10-stage wire-feed gear, v =0.25 to 2.6 m/min; electric motor; N = 180 W, n = 3,000 RPM, V = 36 V, operational voltage = 12-24 V, wire thickness 1.5-2 mm. "KUMA-5M" is suitable for carrying out the following work: built-up welding of rotors and similar profiles of a diameter of 20 mm or more, and of crankpins and webs of automobile and tractor crankshafts; built-up welding of inside surfaces of drill holes of a diameter of 50 mm or more, front sides of rotating bodies, surfaces of key seats and key shafts, plane surfaces; and welding of flanges to shafts and to thin-walled tubes. There are 4 figures.

ASSOCIATION: Chelyabinsk Plant (Ulmann, I.E.); "S. Ordshonikidze" Chelyabinsk Plant, Chelyabinsk Institute of Mechanization and Eletrification of Agriculture (Myshkov, K.N. and Antonovich, V.I.).

Card 2/2

ACC NR: AP6024374   SOURCE CODE: UR/0280/66/000/002/0149/0155

AUTHOR: Dem'yanov, V. F.; Myshkov, S. K. (Leningrad)

ORG: none

TITLE: On the solution of certain optimal problems in nonlinear automatic control systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1966, 149-155

TOPIC TAGS: nonlinear automatic control system, optimal control, successive
approximation, functional equation

ABSTRACT: The authors state, in a formulation slightly different from that of Pontryagin's
"maximum principle" (Pontryagin, L. S., et al. Matematicheskaya teoriya optimal'nykh
protsessov. Fizmatgiz, 1961), the necessary condition that must be satisfied by optimal control
in a nonlinear automatic control system, for such problems as finding a control $v(t) \in U$ such
that

$$I(v) = \min_{u \in U} I(u) \qquad\qquad (1)$$

Card   1/2

ACC NR: AP6024374

and finding v ∈ U such that

$$I(v) = \min_{u \in V} I(u) \tag{2}$$

where U is a class of controls, v is the optimal control. A theorem pertaining to the necessary optimality condition is formulated and proved: Theorem: So that the functional I(u), specified with respect to U and having its gradient within U, may reach its minimum for the control v ∈ U, it is necessary, in the event of convexity of the functional I(u), and sufficient that

$$\min_{u \in U} \int_{0}^{t} G_v^{\circ}(\tau)(u(\tau) - v(\tau))d\tau = 0. \tag{3}$$

where $G_v(\tau)$ is the gradient of the functional I(u), calculated at the point u = v. A method of successive approximations is proposed for finding the equation satisfying the necessary optimality condition. The applicability of this method illustrated for the case of the control of the flight speed of an aircraft by adjusting the thrust of its engine. Orig. art. has: 2 figures, 43 formulas.

SUB CODE: 12, 01/09/ SUBM DATE: 20Aug64/ ORIG REF: 007

Card 2/2

37M/6
780.1
.M9

MYSHKOV, VASILIY NIKITOVICH

VENGRIYA EKONOMIKA I VNESHNYAYA TORGOVLYA (HUNGARY, ECONOMICS AND
FOREIGN TRADE) MOSKVA, VNESHTORGIZDAT, 1956.

158 p. ILLUS., MAPS, TABLES.

L 7913-66   ENT(1)/EWP(m)/FCS(k)/EWA(c)   WW

SOURCE CODE: UR/0043/65/000/004/0112/0119

ACC NR: AP5027359

AUTHOR: Myshkova, L. I.

ORG: none

TITLE: The effect of dissipative and isentropic flow interactions on a given region of bodies moving with hypersonic speeds

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 4, 1965, 112-119

TOPIC TAGS: viscous flow, inviscid flow, boundary layer, isentropic flow, velocity distribution, hypersonic flow, mixing zone

ABSTRACT: The mixing problem between viscous and inviscid streams in the base region of a two-dimensional body was studied analytically. The mixing model in the separation zone is shown in Fig. 1. The flow is assumed to be compressible, and the pressure ratio is expanded in powers of the pressure parameter $\frac{dA}{dx}$, where $\frac{dA}{dx} = k\frac{dA^*}{dx}$ $(0 < k < 1)$. The density-viscosity product was assumed to remain constant across the mixing zone,
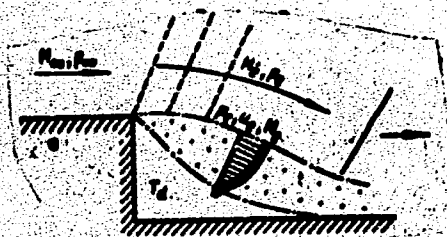
UDC: 533.601. 155

Card 1/2

L 7913-66
ACC NR: AP5027359

Fig. 1.

and the viscosity coefficient was assumed to vary linearly with the temperature. The momentum and energy equations were written in terms of Van Mise's coordinates (x, ψ) and integrated numerically. The velocity and the temperature distribution in the mixing zone were plotted graphically, and it was found that above Mach 8 the induced pressure affects both the velocity profile and the stagnation temperature profile in the separation zone. The author expresses her deep gratitude to Professor I. P. Ginsburg for his valuable advice and help and to Professor S. V. Vallander for evaluating the obtained results. Orig. art. has: 21 equations and 20 figures.

SUB CODE: ME/   SUBM DATE: 27Apr64/   ORIG REF: 002/   OTH REF: 001

Card 2/2 (aw)

AUTHORS: Zashchepin, A.N., and Myshkovskaya, S.A.

TITLE: Slag Portland Cement for the Concrete Pavements
              of Roads and Airfields (Shlako-portland-tsement
              dlya betonnykh pokrytiy dorog i aerodromov)

PERIODICAL: Tsement, 1958, Nr 6, pp 20-23 (USSR)

ABSTRACT: In several foreign countries, slag portland
              cement with an addition of blast furnace slag of
              14 to 70% is used for paving roads and airfields.
              In the USSR, the State Standard GOST 970-41 spe-
              cifies the use of 20 to 85% of slag in concrete
              mixtures. Pure clinker with 15 to 30% granulated
              blast furnace slag is here investigated. The
              clinker was ground to a specific surface of
              4,240 cm^2/g, the slag to 3,750, 6,000 and 8,000
              cm^2/g. The concrete samples were saturated with
              water and then cooled to -15 to -20°C. After
Card 1/3   this, they were thawed in water of 10 to 17°C.

14

SOV/101-58-6-6. 13

Slag Portland Cement for the Concrete Pavements of Roads and
Airfields

The test results (Figure 1) show that the re-
sistance increases with the specific surface of
the cement and the slag. The resistance to com-
pression and bending is, during the first seven
days, 10-20% lower than that of pure clinker with-
out slag, but after 28 days it is 10% higher. If
the specific surface of the slag is increased from
3,750 to 8,000 cm^2/g the resistance is higher al-
ready in the first seven days. Concrete with slag
of 6,000 cm^2/g and an air-attracting addition is,
after 700-800 cycles of freezing and thawing, more
frost resistant than pure clinker.

Card 2/3

SOV/121-59-6-6/13

Slag Portland Cement for the Concrete Pavements of Roads and Airfields

There are 2 sets of graphs, 1 table and 1 Soviet reference.

Card 3/3

VOLKOV, M.I., prof.; IVANOV, F.M.kand.tekhn.nauk; KLIMASHEV, F.S.,inzh.;
KOROLEV, I.V., inzh.; KURDENKOV, B.I., inzh.; MYSHKOVSKAYA, S.A.,
kand.tekhn.nauk; NEKRASOV, V.K., kand.tekhn.nauk; SPERANTOV, N.A.,
kand.tekhn.nauk; YAKUNIN, O.A., inzh.; MOTYLEV, Yu.L., red.;
LAKHMAN, F.Ye., tekhn.red.

[Metallurgical slags in road construction] Metallurgicheskie
shlaki v dorozhnom stroitel'stve. Moskva, Nauchno-tekhn.izd-vo
M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1959.
182 p.
(MIRA 12:4)
        (Road materials)   (Slag)

MYSHKOVSKAYA, V.A.

Formation of focal bilateral chorea. Zhur.nevr. i psikh. 56 no.9:
709-713 '56.   (MLRA 9:11)

1. Klinika nervnykh boleaney (zav. - prof. Ye.L.Venderovich
[deceased]) I Leningradskogo meditsinskogo instituta imeni I.P.Pavlova
        (CHOREA,
            focal bilateral, form mechanism (Rus))

MYSHKOVSKAYA, V.A.

Focal epilepsy in vascular diseases of the brain. Zhur.nevr. i psikh.
59 no.8:912-918 '59.   (MIRA 12:12)

1. Kafedra nervnykh bolezney (zav. - prof. D.K. Bogorodinskiy) I
Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.
                (EPILEPSY etiol.)
                (BRAIN blood supply)

BOGORODINSKIY, D. K.; MYSHKOVSKAYA, V. A. (Leningrad)

Malignant connective tissue tumors of intracraniovertebral (craniospinal) localization. Arkh. pat. no.12:73-76 '61.
(MIRA 15:7)

1. Iz kafedry nervnykh bolezney I Leningradskogo meditsinskogo instituta imeni I. P. Pavlova.

(MEDULLA OBLONGATA—CANCER)

MYSHKOVSKIY, A.S.

Production of cast-iron kitchen utensils. Lit.proizv. no.7:6-8 O '54.
(Kitchen utensils) (Iron founding)   (MLRA 7:12)

AUTHOR: Myshkovskiy, A.S.   SOV/128-58-12-12/21

TITLE: The Casting in Chill Molds of Cast Iron Parts (Otlivka chugun-
               nykh detaley v kokil')

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 12, pp 21 - 22 (USSR)

ABSTRACT: Information is given on the different types of metallic
               molds, used at the "Dnepromet" Plant for the production of
               cast-iron parts, such as bevel gears for chain drives;
               blocks with grooves; and kitchen range doors and frames.
               Technical characteristics of the molds are given. There
               are 6 photos and 2 tables.

Card 1/1

MYSHKOVSKIY, I.D., inzh.

Some economic problems connected with the increase of efficiency
of the new types of traction. Zhel. dor. transp. 45 no.6:36-39
Je '63.   (MIRA 16:7)
        (Railroads—Cost of operation)
        (Locomotives—Performance)

MYSHKOVSKIY, I.D., inzh.

Automation of planning and analytical calculations on
railroads. Vest. TSNII MPS 22 no.3:48-50 '63.

(MIRA 16:7)

1. Upravleniye Moskovskoy zheleznoy dorogi.
(Railroads—Management)
(Railroads—Electronic equipment)

MYSHKOVSKII, I.E., dots.

The economic problems of the increase of the operative efficiency
of locomotives. Zhel. dor. transp. 46 no.17:13-18 Ja'64.   (MIRA 17:11)

137-58-6-12330

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 163 (USSR)

AUTHORS·   Nikolayev, K.G., Myshkovskiy, L.M.

TITLE: Welding Practice (Welding Technology and Equipment) Svar-
            ochnoye proizvodstvo (Svarochnaya tekhnika i oborudovaniye)

PERIODICAL· Sb. inform. statey dlya sudostroiteley. Leningrad, Sud-
            promgiz, 1957, pp 167-198

ABSTRACT: A description of welding equipment exhibited at the All-
            Union Industrial Exhibition. Characteristics of power supplies,
            automatic gas-shielded arc welding units and welding outfits
            for flux welding, coated-electrode slag welding, and contact
            welding machines are described briefly.
                                                        A.N.

            1. Welding--USSR

Card 1/1

BOBRITSKIY, K. K.; MYSHKOVSKIY, S. A.

Insulation of the wheels of a one-rail truck. Put' i put.
khoz. 6 no.10:42 '62.   (MIRA 15:10)

1. Predsedatel' Obshchestvennogo konstruktorskogo byuro,
Dneptopetrovsk (for Bobritskiy). 2. Zaveduyushchiy tekhni-
cheskim kabinetom Obshchestvennogo konstruktorskogo byuro,
Dnepropetrovsk (for Myshkovskiy).

(Car wheels) (Electric insulators and insulation)

MYSHKOVSKIY, V.

Give our youth a firm ideological background. Prof.-tekh.obr. 17
no.3:21 Mr '60.   (MIRA 13:6)

1. Direktor tekhnicheskogo uchilishcha No.2, g.Minsk.
       (Communist education)

MYSHKOVSKIY, V., inzhener-kapitan

Radio control systems of antiaircraft rockets. Voen.vest. 43 no.
7:92-95 Jl '63. (MIRA 16:11)

KATKOV, Nikolay Pavlovich; BASSEIN, Vladimir Vasil'yevich;KATKOV,
          Mikhail Pavlovich; KUDRYAVTSEV, Nikolay Aleksandrovich;
          MYSHKOVSKIY, V.A., insh., retsensent; SLOBTSOV, V.Ye.,
          inzh., retsenzent; OLEV, S.M., inzh., retsenzent;
          DUNAYEV, P.A., red.; YERMAKOV, N.P., tekhn. red.

          [Mechanisation of auxiliary operations in forging; an
          album of drawings] Mekhanizatsiia protsessov goriachei
          shtampovki; al'bom chertezhei. Pod red. P.A.Dunaeva.
          Moskva, Mashgiz, 1963. 111 l.   (MIRA 16:8)
                    (Forging—Equipment and supplies)

MYSHKOVSKIY, Ye.V.

Origin of the interchangeability of parts at the Tula Gun Plant
in the 18th century. Trudy Inst.ist.est. i tekh. 45:156-173
'62.   (MIRA 15:8)
                    (Tula—Interchangeable mechanisms)

MYSHLAYEVA, L.V.; KRASNOSHCHEKOV, V.V.; SEDOVA, I.V.

New methods for the determination of silicon. Trudy MKHTI no.44:132-138
'64.   (MIRA 18:1)

KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; KHACHATURYAN, O.B.; KRASNOSHCHEKOV, V.V.

Potentiometric method for the determination of silicon in organo-
silicon compounds. Izv.vys.ucneb.zav.; khim. i khim.tekh. 7 no.2:
198-201 '64.   (MIRA 18:4)

1. Kafedra analiticheskoy khimii Moskovskogo khimiko-tekhnolo-
gicheskogo instituta im. D.I.Mendeleyeva.

Z/011/62/019/010/001/009
E112/E435

AUTHORS: Myshlennikova, V.A., Li-Izey-Sya, Okhrimenko, I.S.

TITLE: Preparation of organo-dispersed resin solutions,
             based on high-molecular polyoxymethylene

PERIODICAL: Chemie a chemická technologie. Přehled technické a
             hospodářské literatury, v.19, no.10, 1962, 464,
             abstract Ch 62-6268 (Lakokras. Materialy, no.3, 1962,
             12-14)

TEXT: Polyoxymethylene or polyformaldehyde is an excellent raw
material for the production of paints and lacquers.   Its melting
point is 173 to 175°C and it is highly crystalline.   The polymer
is, under normal conditions, insoluble in the conventional
solvents.   It only swells slightly in dibutylphthalate, pyridine
and chlorophenol.   It shows good swelling in cyclic hydrocarbons
and an even better swelling in phenols.   In some solvents
formation of gels takes place at elevated temperatures.   In the
preparation of the dispersed organosols, which are to be converted
later onto films by means of heating, the dispersing agent is an
important component.   Dibutylphthalate and pine oil proved to be
Card 1/2

MYSHLENNIKOVA, V.A.; SERGEYEVA, L.A.; OKHRIMENKO, I.S.

Production and some properties of organodispersions of a fluorine-containing copolymer. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.1:128-132 '63. (MIRA 16:6)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta, kafedra tekhnologii lakov, krasok i nemetallicheskikh pokrytiy i kafedra organicheskoy khimii.
(Polymers) (Fluorine compounds) (Dispersion)

MYSHLEVSKIY, L.M., insh.

Using nomograms of aligned points with parallel scales in design-
ing hydraulic drives. Vest.mash. 40 no.7:14-19 Jl '60.
(MIRA 13:7)

(Nomography (Mathematics))
(Oil-hydraulic machinery)

83286

S/121/60/000/009/004/006
A004/A001

28.1000

AUTHORS: Zaychenko, I.Z., Myshlevskiy, L.M.

TITLE: Small-Size and Low-Inertia Blade-Type Hydraulic Engines

PERIODICAL: Stanki i Instrument, 1960, No. 9, pp. 27-31

TEXT: Since the extensive development of the automation of machine tools
and other machines demands cheap, quick-response and compact hydraulic engines
of rotation type, the ENIMS has developed a range of blade-type hydraulic engines
which are now mass-produced at the Yeletskiy zavod stanochnoi gidroapparatury
(Yelets Plant for the Manufacture of Hydraulic Machine Tool Equipment). The
authors point out that these hydraulic engines, in comparison with a-c and d-c
electromotors, have considerably smaller overall dimensions, less weight and a
lower moment of inertia. The comparative data are given in a tabel. The authors
then give a detailed description and the overall and coupling dimensions of the
hydraulic engine models MГ (MG) 16-13, MG16-14, MG16-15A, MG16-15, and MG16-16A,
emphasizing that blade-type hydraulic engines are of a double-acting type, i.e.
during one shaft revolution two cycles of intake and discharge of the pressure
fluid are taking place. A special feature of the hydraulic engine design is the

Card 1/2

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A004/A001

Small-Size and Low-Inertia Blade-Type Hydraulic Engines

use of steel distributing disks which, in combination with the automatically tightened rear distributing disk, ensures a high resistance to wear and long life of the engine. This special feature of design makes blade-type hydraulic engines less sensitive against contaminations of the pressure fluid than e.g. piston-type hydraulic engines. In view of the infinitesimal small moment of inertia of the hydraulic engine itself, its reversing time without flywheel mass is also infinitesimal small. For the MG16-13 engine, e.g., the reversing time at 1,000 rpm amounts to 0.002 sec. A table is presented which shows the characteristics of hydraulic engines, expressing the dependence of efficiency and power on the number of shaft revolutions. The authors give a description of the connecting layout between hydraulic engine and pump. There are 9 figures, 2 tables and 3 Soviet references.

Card 2/2

ZAYCHENKO, I.Z.; MYSHLEVSKIY, L.M.; ZAYTSEVA, K.V.; KAMENETSKIY,
G.I.; MAZYRIN, I.V.[deceased]; SHCHERBAKOV, V.I.;LOZHKIN, O.V.;
CHIGAREVA, E.I., red.; KOVAL'SKAYA, I.F., tekhn. red.

[Development of the designs of hydraulic and pneumatic equip-
ment and of lubrication and filtration systems for machine tools
abroad] Razvitie konstruktsii gidravlicheskogo i pnevmaticheskogo
oborudovaniia, smazochnykh i fil'truiushchikh ustroistv metallo-
rezhushchikh stankov za rubezhom; obzor. Moskva, TSINTIMASH,
1961. 101 p.   (MIRA 16:5)

1. Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut
metallorezhushchikh stankov.
              (Machine-tools—Design and construction)

S/121/61/000/006/002/012
D040/D112

AUTHORS: Zaychenko, I.Z., Konovalov, V.M., Myshlevskiy, L.M., and
            Stepanenko, G.M.

TITLE: New long-life vane pumps

PERIODICAL: Stanki i instrument, no. 6, 1961, 6-10

TEXT: New vane pumps for the hydraulic drives of machine tools have been
developed by ENIMS in cooperation with the Yeletskiy zavod stanochnoy gidro-
apparatury (Yelets Machine Tool Hydraulic Equipment Plant). The new "Г" (G)
series pumps will replace the old "Л" (L) pumps, i.e. Л1ф (L1F), Л 3ф
(L3F), and Л 5К (L5K), that have high hydraulic losses. The article gives
detailed design description of the Г 12-2 (G12-2) and Г 12-4 (G12-4) and
dimension charts of other pumps of the series. The major share of leakage
in the old design is through the passage q_3 (Fig. 2), i.e. from the groove
under vanes into the intake space through the butt-end gap between the rotor
and the discs. This explains why wear on the butt faces of the distributing
discs raises oil loss so much. In the new design (Fig. 3) the distribution
discs (8) and (7) are made of case-hardened 20Х (20Kh) steel with Rc 56-52
hardness, and the disc (8) is floating, i.e. it is pressed to the stator (3)
Card 1/6

New long-life vane pumps

by springs (9) at the start of operation, and by oil pressure during operation. In Fig. 3, 1 is the pump casing, 2 the cover and 5 the rotor. This makes the assembling simpler and eliminates the danger of jamming. The output and intake ducts are open, the rotor has no trunnion. The G12-4 has eight vanes (4) and the G12-2 twelve. The rubber sealings (10) and (6) are standard. The stator profile and dimensions were chosen in accordance with recommendations by I.Z. Zaychenko (Ref. 2: "Stanki i instrument", no. 8, 1956). When coupled, the G12-2 and G12-4 pumps (Fig. 4) have one intake and two separate outlets. Calculation of the pressure on the floating disc is given. The G12-2 pumps of 5-50 liter/min capacity can work at up to 1440 shaft rpm. The life-time of the new pumps is 4-5 times longer than that of the old they are replacing. Pressure on the floating distributing disc (pressing it to the stator) must have a certain value (α) that is obtained when the floating disc surface area under the effect of intake oil pressure (F_{in}) exceeds F_o 1.19 times, i.e. the following condition must be satisfied:

$$\alpha = \frac{F_{in}}{F_o} \quad > \quad 1.19. \tag{5}$$

Card 2/6

New long-life vane pumps

S/121/61/000/006/002/012
D040/D112

The maximum work pressure of the G12-4 type pumps is 50 kgf/cm , and of the
G12-2 - 64 kgf/cm . The G12-4 is smaller than the G12-2. Both are designed
for application in new standard-unit power heads developed by the SKB-1 for
Stankozavod im. S. Ordzhonikidze (Machine Tool Plant im. S. Ordzhonikidze)
as well as other hydraulic drives where minimum size and weight are impor-
tant. There are 12 figures, 3 tables and 2 Soviet references.

Card 3/6

ZAYCHENKO, I.Z.; MYSHLEVSKIY, L.M.; KAMENIR, Ya.A., kand. tekhn.
        nauk, retsenzent; LESHCHENKO, V.A., kand. tekhn. nauk,
        red.

        [Rotary pumps and hydraulic engines] Lopastnye nasosy i
        gidromotory. Moskva, Izd-vo "Mashinostroenie," 1964. 211 p.
                                              (MIRA 17:4)

L 55256-65   EWT(1)/EWP(m)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/T-2/EWP(k)/FCS(k)/EWA(1)
Pd-1/Pf-4   EM

ACCESSION NR: AP5011307   UR/0122/65/000/004/0041/0047
                                                       621.67

AUTHORS: Zaychenko, I. Z. (Doctor of technical sciences); Myshlevskiy, L. M.
(Engineer)

TITLE: Investigation of unsteady flow from flat double-action vane pumps with
balanced (or unloaded) vanes

SOURCE: Vestnik mashinostroyeniya, no. 4, 1965, 41-47

TOPIC TAGS: vane pump, pump/ BG12 22 vane pump, BG12 24 vane pump

ABSTRACT: To investigate the unsteady flow from flat double-action vane pumps with
force compensated vanes, the unsteady flow components due to pumping chamber volume
change and due to pressure changes during transit from inlet port to outlet port
were calculated theoretically and compared with experimental results from vane pump
types BG12-2 (BG12-22, BG12-24). Theoretically, it was found that the coefficient
of unsteady flow due to volume change

$$\delta_g = \frac{\left(\dfrac{dV}{dt}\right)_{n\,max} - \left(\dfrac{dV}{dt}\right)_{n\,min}}{Q}$$

for the BG12-2 series should be for Q = 25 - 70 liter/min, δ_g = 1.27 - 1.3%; for
5-18 liter/min, 3-3.2% and should decrease with increased numbers of vanes becoming
Card 1/3

L 55256-65

ACCESSION NR: AP5011307

1.27%, 0.4% and 0.11% for 10, 14 and 16 vanes respectively (Q = 70 liter/min). Experimentally, δg did not exceed 3% for capacities Q = 5 - 70 liter/min. The coefficient of unsteady flow due to fluid compressibility was derived theoretically and was found to increase with increasing output pressure, decreasing number of vanes, decrease in vane thickness, and decreased ϕ_1 (angle over which pressurization occurs). Thus, the pressure effects can be decreased by providing a wedge-shaped opening to extend the pressurization time. The overall coefficient of unsteady flow is the sum of these two effects and is found to agree very well with experimental results (see Fig. 1 on the Enclosure). Orig. art. has: 7 figures and 26 formulas.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 01   SUB CODE: ME

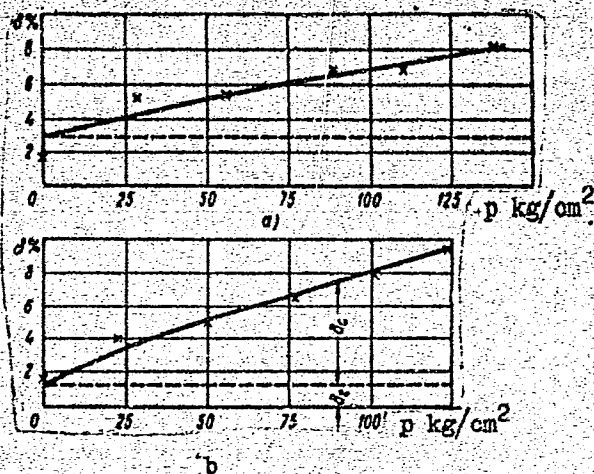NO REF SOV: 004   OTHER: 001

Card 2/3

L 55256-65

Fig. 1. Coefficient of unsteady flow as a function of outlet pressure: a - pump BG12-22 (18 liter/min); b - BG12-24 (70 liter/min), x represents experimental points

Card 3/3

L 26788-66 EWT(m)/T DJ

ACC NR: AP6017442 SOURCE CODE: UR/0122/65/000/008/0042/0043

AUTHOR: Myshlevskiy, L. M. (Engineer)

ORG: none

TITLE: BG12-2 vane pumps for hydraulic drives in machines

SOURCE: Vestnik mashinostroyeniya, no. 8, 1965, 42-43

TOPIC TAGS: hydraulic pump, hydraulic equipment/BG12-2 hydraulic pump

ABSTRACT: The author describes the BG12-2 vane pump series developed at the Experimental Scientific Research Institute of Metal-Cutting Machine Tools for use in hydraulic drives. These pumps were designed to eliminate the disadvantages of ordinary vane pumps: wear on the stator and plates where they are in mutual contact which shortens the service life of the pump and limits it to use at pressures below 70 kg/cm^2. The pump is designed so that the vanes are relieved from the pressure of the working fluid in the radial direction so that the unit can operate under continuous duty conditions at pressures up to 125 kg/cm^2. The overall dimensions of the pumps are small and the design is simple and reliable. Basic technical data are tabulated for 11 pumps in this series. The capacities in liters per minute are given for 36 tandem pumps in this series. The units are designed for deliveries from 5 to 70 l/min. Orig. art. has: 1 figure and 2 tables. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 1/1 cc

UDC: 621.666.2

KREMENCHUK, G.A.; MYSHLINA, N.D.

Comparative characteristics of glycerin mixture and borate buffer
solution as preservatives of diphtheria bacilli. Trudy Irk.
NIIEM no. 7:349-353 '62   (MIRA 19:1)

1. Iz bakteriologicheskoy laboratorii dorozhnoy sanitarno-
epidemiologicheskoy stantsii Vostochno-Sibirskoy zheleznoy dorogi.

MYSHLYAVTSEV, D.I., predsedatel'.

The Kiev District of the Capital. Gor.khoz.Mosk. 27 no.7:7-9 Jl '53.
(MLRA 6:7)

1. Ispolnitel'nyy komitet Kievskogo rayonnogo Soveta deputatov trudya-
shchikhsya.   (Moscow--Buildings) (Buildings--Moscow)

(handwritten)

AUTHORS: Ivanov, S.I., Shalinets, B.A., Myshlyayev, A.M.   47-6-36/37

TITLE: A Conference on the Method of Teaching Physics(Konferentsiya po metodike fiziki)

PERIODICAL: Fizika v Shkole, 1957, # 6, page 93 (USSR)

ABSTRACT:

Berdichev, and

    A scientific conference on the method of teaching physics took place at the Moskva Oblast' Pedagogical Institute with teachers from the city of Moscow and the Moscow Oblast' and representatives of the Moscow, Stalingrad, Krasnodar Mariyskiy [in Yoshkar-Ola], Kabardino-Balkarskiy, Tula, Yaroslavl', Shuya pedagogical institutes, the Institut of Psychology APN and the Kaluga Oblast' Institute for the Improvement of Teachers.

    The following reports were heard and discussed: S.I. Ivanov - "The Methods of Methodical Researches", O.N.Lapina - "The Rise and Development of Concepts of Temperature and Quantity of Heat" (at the 7-class school), Ye.Kh. Lyatker - "The Rise and Development (at the pre-school age and the 7-class school) of Basic Concepts in the Field of Electricity", T. Ya. Ishkova - "The Rise and Development (during the pre-school age and at the 7-class school) of Concepts of Magnetism", A.V. Selenginskiy - "On the Development of

Card 1/2

A Conference on the Method of Teaching Physics   47-6-36/37

Concepts in the Field of Mechanics and Heat", L.I. Tigranova -
"The Psychological Peculiarities of Pupils in Learning the
Basic Concepts of Physics", A.N. Kaygorodov - "Conveying to the
Students Skill in Making Measurements Before They Take up
Studies in Physics", S.F. Shilova - "The Home Work of the Pupils
in Physics, Difficulties and Mistakes in Carrying It Out",
G.P. Kondrasheva - "Individual Observations Made on Two Pupils
Doing Their Home Work in Physics", N. Ye. Parfent'yeva - "The
Performance of Home Work in Physics by Pupils of a 7-class
Boarding School".

The conference adopted resolutions on continuing and co-
ordinating the scientific-research work into the method of
teaching physics, on the question of forming physical concepts
and obtaining skill, and also on the method of organizing
home work. The Chair for Methods in Teaching Mathematics and
Physics of the Moskva Oblast' Pedagogical Institute assumed the
duty of organizing a mutual information program and rendering
consultation on this subject.

AVAILABLE: Library of Congress

Card 2/2

MYSHLYAYEV, A.M.

Presentation of dynamics in the eighth grade in the secondary school. Uch. zap. GGPI no.8:139-160 '58.   (MIRA 13:8)
(Dynamics—Study and teaching)

MYSHLYAYEV, A.M. (g. Karachayevsk); SEREBRENNIKOV, V. (Perm')

Contents and structure of a new textbook for senior grades. Fiz.
v shkole 22 no.5:60-62.   (MIRA 15:12)
                    (Physics—Textbooks)

MYSHLYAYEV, A.M. (g. Karachayevsk)

Equipment for experiments on the kinematics of rectilinear
movement. Fiz.v shkole 22 no.5:63-64 S-O '62.   (MIRA 15:12)
        (Physics--Experiments)   (Motion)

MYSHLYAYEV, A.M.; PUSTIL'NIK, I.G.; MOROZ, L.I.

Discussing the contents and structure of the school physics
course. Fiz. v shkole 23 no.5:40-45 S-O '63.

(MIRA 17:1)

1. Pedagogicheskiy institut, g. Karachayevsk (for Myshlyayev).
2. 36-ya srednaya shkola, g. Sverdlovsk (for Pustil'nik).
3. Institut vechernikh (smennykh) i zaochnykh shkol Akademii
pedagogicheskikh nauk RSFSR, Leningrad (for Moroz).

MYZHLZAYEV, J.M., elektromekhanik

    Device for checking the operational stat.. of the ....
    Avtom., telem. i sviaz' no. 0:36-37 .. 0:.

    1. Achinckaya distantsiya T ... pre-.........

MYSHLYAYEV, I.V.

ca

The problem of production of residues in the lampblack industry. N. A. Piroshkov and I. V. Myshlyaev. *Lz-hayn Prom.* 8, No. 4, 24-5(1948); cf. following abstr.

Marshall Sittig

METALLURGICAL LITERATURE CLASSIFICATION

MISHLYAYEV, I. V.

PIROZHKOV, N.A.; MYSHLYAYEV, I.V., retsenzent; PLEMYANNIKOV, M.N.,
redaktor; STOL'YAKOVA, N.V., tekhnicheskiy redaktor

[Production of carbon black] Proizvodstvo sazhi. Moskva, Gos.
nauchno-tekhn. izd-vo legkoi promyshlennosti, 1951. 118 p.
(Carbon black)   (MIRA 7:8)

MYSHLYAYEV, I.V., nauchnyy sotrudnik; RUBINA, S.I., kand. tekhn. nauk;
Prinimali uchastiye: ZALOMAYEV, Yu.L.; SAMSONOV, V.D., inzh.

The "Doubles," new decorative-facing double-ply materials
made with the use of polyurethane foams. Nauch.-issl. trudy
VNIIPIK no.14:75-83 '63.   (MIRA 18:12)

1. Nachal'nik laboratorii Vladimirskogo nauchno-issledovatel'-
skogo instituta sintet'cheskikh smol (for Zalomayev).

Transportation, Automotive

Innovators in automotive transportation, V pom. profaktive, 13, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952, Unclassified.

KYSHLYAYEV, K.

Kiev. Stroitel' 2 no.8:7-8 Ag '56.   (MLRA 9:12)
            (Kiev--Building)

My[...]y v L

MYSHLYAYEV, L. V.

"Study of Operation of Slat Suction Pump." Min Higher
Education USSR, Moscow Order Labor Red Banner Higher Technical School
imeni Bauman, Moscow, 1955. (Dissertation for the Degree of Candidate
in Technical Sciences)

SO: M-955, 16 Feb 56

LUBENETS, V.D., kandidat tekhnicheskikh nauk; CHISTYAKOV, F.M., kandidat
    tekhnicheskikh nauk; MYSHLYAYEV, L.V., inzhener.

    Investigating high-pressure compressor performance. [Trudy] MVTU
    no.52:83-115 '55.   (MLRA 9:8)
                        (Compressors)

LUBENETS, V.D., kand.tekhn.nauk; MYSHLYAYEV, L.V., kand.tekhn.nauk

Designing intermediate connectors for large horizontal com-
pressors. [Trudy] MVTU no.95:85-94 '60. (MIRA 14:8)
(Compressors)

L 38612-65   EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b)/EWA(c)   Ps-4   IJP(c)   JD
ACCESSION NR: AP5005305   S/0181/65/007/002/0591/0599

AUTHOR: Myshlyayev, M. M.

TITLE: On the dislocation structure of aluminum during the creep process

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 591-599

TOPIC TAGS: aluminum, creep, dislocation structure, dislocation loop, block
structure, dislocation net

ABSTRACT: The dislocation structure of polycrystalline aluminum during the course
of creep was investigated with a JEM-6A electron microscope. The samples were de-
formed under uniaxial tension, with the stresses maintained constant to 1%. The
change in temperature during the experiment did not exceed 1°C. The results have
shown that the creep curves have a similar character for pure and commercial alu-
minum, but the latter has a larger initial deformation and a larger deformation
accumulated during the creep. The results have established that short-duration
plastic deformation under load gives rise to complicated irregular dislocation nets.
During the first stage of the creep, these tangled dislocation nets disappear and

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L 38612-65

ACCESSION NR: AP5005305   6

an equilibrium block structure is produced, which is conserved during the entire
stationary creep stage. The block structure is retained also under considerable
changes of the deformation conditions (temperature and stress), but is sensitive
to the prior history of the metal. A correlation is established between the struc-
tural constant of the aluminum and the distances between the dislocations in the
block boundaries. Other differences between pure and commercial aluminum are also
discussed. "I am deeply grateful to V. L. Indenbom under whose guidance the pre-
sent work was performed, and also to Yu. N. Rabotnov, S. N. Zhurkov, A. N. Orlov,
and V. I. Betekhtin for interest in the work and for a discussion during the
course of its performance." Orig. art. has: 5 figures, 2 tables, and 1 formula.

ASSOCIATION: Institut gidrodinamiki SO AN SSSR, Novosibirsk (Institute of Hydro-
dynamics, SO AN SSSR)

SUBMITTED: 14Jul64   ENCL: 00   SUB CODE: SS, MM

NR REF SOV: 003   OTHER: 000

Card 2/2

MYSHLYAYEVA, L. V.

Kreshkov, A. P. and Myshlyayeva, L. V. - "The increase in the water resistance of gypsum made articles," Trudy Mosk. khim.-tekhnol. in-ta im. Mondeleyeva, Issue 15, 1949, p. 75-79

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

MYSHLYAYEVA, L. V.

Kreshkov, A. P. and Myshlyayeva, L. V. - "The application of ethyl ether of orth-silicic acid for refractory bonding purposes." Trudy Mosk. khim.-teknol. in-ta im. Mendeleyeva. Issue 15, 1949, p/137-41

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

KRESHKOV, A.P.; BORK, V.A.; MYSHLYAYEVA, L.K.; NESSONOVA, G.D.;
    CHERKASSKIY, A.A., redaktor; LUR'YE, M.S., tekhnicheskiy
    redaktor

[Analysis of silicon organic compounds] Analiz kremniiorgani-
cheskikh soedinenii. Moskva, Gos. nauchno-tekhnicheskoe izd-vo
khimicheskoi lit-ry, 1954. 255 p.   (MLRA 8:1)
        (Silicon organic compounds)
        (Chemistry, Analytical)

MYSHLAYEVA, L. V.

Distr: 4E4J/4E3d/4E2c(J)

√Alkylalkoxysilanes.   A. P. Kreshkov, L. V. Myshlaeva, and L. M. Khananashvili.   U.S.S.R. 108,137, Oct. 25, 1957. The title comrds. are obtained from alkylhalosilanes and the corresponding alcs. For better results the alkylhalosilanes prior to reacting with the alcs. are transformed into alkylphenylaminosilanes.   M. Hoseh

MYSHLYAYEVA, L. V.

Distr: 4E4j/4E3d/4E2c(j)

Colloid-chemical processes in the interaction of tetraalkylsilanes with aqueous aluminate solutions. A. P. Kreshkov, L. V. Myshlyaeva, and L. M. Khananashvili. Kolloid. Zhur. 19, 440-53(1957); cf. C.A. 48, 13427d.— When an ester $Si(OR)_4$ was mixed with a soln. of approx. compn. $Na_4Al_2O_5$ + aq., a ppt. appeared after t min. When R was Me, t was 1-2. When R was Et, t was, e.g., >60 at the ratios Al:Si greater than 3 and smaller than 0.16, and was short at Al:Si = 1 to 0.5. At Al:Si = 1, t had a max. when the aluminate soln. was dild. with H_2O until the total NaOH concn. was about 10-15%. Temp. increase from 0° to 100° lowered t, e.g. from 1700 to 3. The ratio Al:Si in the ppt. was greater than in the initial soln., and the 1st fractions of the ppt. contained more Al than did the following fractions. A cryst. ppt. had the ratio $Na_2O:SiO_2:Al_2O_3:EtOH$ of 0.93:1:0.1:0.038; its x-ray spacing was similar to those of albite and kaolinite, and its infrared spectrum had lines corresponding to OH, SiO, and NaO bonds. When R was Pr or Bu, t was long, even at 70°.   J. J. Rikerman—

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KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; KHANANASHVILI, L.M.

Interaction of tetraalkoxysilanes and their derivatives with
several classes of inorganic compounds. Trudy MKHTI no.24:333-
347 '57.
(MIRA 11:6)

(Silane)   (Hydroxides)

L. V. MYSHLYAYEVA

USSR/General Topics - Methodology, History, Scientific   A-1
          Institutions and Conferences, Instruction, Problems
          Concerning Bibliography and Scientific Documentation.

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 5.

Author   : A.P. Kreshkov, L.V. Myshlyayeva.

Inst   : D.I. Mendeleyev Institute of Chemical Technology, Moscow.

Title   : Importance of Some Works of D.I. Mendeleyev and A.M.
             Butlerov with Reference to Silicon-Organic Compounds.

Orig Pub : Tr. Mosk. khim.-tekhnol. in-ta im. D.I. Mendeleyeva,
             1957, vyp. 25, 33-37

Abstract : Bibliography with 12 titles.

Card 1/1

KHANANASHVILI, L.M.; MYSHLYAYEVA, L.V.; MIKHALEV, B.M.; SHKOL'NYY, V.Ye.

Effect of the aqueous solutions of sodium aluminates on
alkylakoxysilanes. Zhur.prikl.khim. 30 no.2:263-271 F '57.
(MLRA 10:5)

1.Kafedra analiticheskoy khimii Moskovskogo khimiko-tekhnologicheskogo
instituta imeni D.I. Mendeleyeva.
(Sodium aluminates) (Silane)

AUTHORS: Presnov, A. P., Mychlyayev, L. V., Chaera. .... , L. .

TITLE: Synthesis of Organosilicon .x.....poun.. From ....n ......,
           (Poiucheniye kremneorganichc.....h oksisoyedineniy iz amino-
           silanov) I. Synthesis of the .lkyl-Alkoxy Silanes from .1...-
           .henyl aminosilanes Which Are Obtained from alkyl-Chloro-
           silanes (I. Poluchcniye alkilalkoksisilanov iz alkilfenil-
           aminosilanov, sintezirueyemykh n. .nove alkilkhlorsilanc.

PERIODICAL: Zhurnal obshchey khimii , 1958, Vol. 28, Nr 8, pp. 2113- ...
             (USSR)

ABSTRACT: With the further development of the chemistry of organosili-
           con compounds their practical exploitation has as well in-
           creased. The alkyl-alkoxy silanes are used in the practice
           of the modification of various classes of inorganic and or-
           ganic compounds and as semiproducts for the synthesis of the
           high-molecular organosilicon compounds (Ref 1). The following
           synthesis methods of these compounds are known from publica-
           tions: 1) Alkylation of the alkoxy silanes or halogen alkoxy-
           silanes with the aid of organozinc compounds and metallic
Card 1/3   sodium (Ref 2) (2 Schemes). 2) Alkylation of the alkoxy silan .

Synthesis of Organosilicon Oxycompounds From Aminosilanes. I. Synthesis of
the Alkyl-Alkoxy Silanes From Alkyl-Phenyl Chlorosilanes Which Are Not Used
From Alkyl-Chlorosilanes

or halogen oxysilanes with the aid of organomagnesium com-
pounds (refs 3-5) or organolithium compounds (refs 6, 7)
(2 Schemes). 3) Substitution of the hydrogen in alkyl silanes
by alkoxy group in the case of action of alcohols in the
presence of lithium-, sodium-, potassium-, and rubidium alco-
holate (1 scheme). 4) Etherification of the alkyl halogen
silanes with the aid of alcohol (1 Scheme).
These methods have, however, certain shortcomings. Only the
fourth method can be used economically, though the production
of products is accompanied by secondary reactions. The authors
worked out a new synthesis method of the alkyl-alkoxy silanes.
It consists in the transformation of the alkyl-chloro silanes
with aniline with subsequent treatment with the alcohols of
the produced alkyl-phenyl amino silanes (both reaction pro-
cesses are given in the schemes (a) and (b)). The yield of
the scheme (a) amounted to 100 %, for the scheme (b) to
80 - 95 %. There are 12 references, of which

Card 2/3

Synthesis of Organosilicon Oxycompoun'... ...om ...inosilan... . .   ...
the Alkyl-Alkoxy ...ilanes From Alkyl-...henyl ...ine ... ...
From Alkyl-Chlorosilanes

...UPMITTED: July 10, 1957

Card 3/3

KRESHKOV, A.P.; MIKHAYLENKO, Yu.Ya.; MYSHLYAYEVA, L.V.; KHANANASHVILI, L.M.

Investigating the products of the reaction of some silicon organic compounds with water-alkaline solutions of aluminates, stannates, and plumbites by means of infrared absorption spectroscopy. Zhur.prikl. khim. 31 no.11:1746-1749 N '58.   (MIRA 12:2)
                    (Silicon organic compounds--Spectra)
                    (Spectrum analysis)

5(0)

AUTHORS: Kreshkov, A P., Keshishyan, T N.,   SOV/72-59-4-3/21
               Myshlyayeva, L. V., Khananashvili, L. M.

TITLE: Investigation and Application of Synthetic Organic Silicates
               (Issledovaniye i primeneniye iskusstvennykh organicheskikh
               silikatov)

PERIODICAL: Steklo i keramika, 1959, Nr 4, pp 11-14 (USSR)

ABSTRACT: The theoretical bases of the formation of organic silicates are
               shown in the papers by A. P. Kreshkov, A. N. Chivikova, V. A.
               Matveyev, G. N. Nessonova, M. L. Darashkevich (Ref 1). The
               synthetic silicates have a number of valuable properties.
               good adhesion to glass, metal, asbestos, tissues, and abrasives
               They may be used for the production of films for glass and
               metal which do not break in heating and they are also highly
               acid-proof. The products which are obtained on the basis of
               alkylalkoxy-silanes are characterized by a good solubility in
               water. Their aqueous solutions are used as hydrophobic im-
               pregnations of building material. A. P. Kreshkov, L V Mysh-
               lyayeva, L. M. Khananashvili (Ref 2) carried out their spec-
               trum and X-ray structural analyses as well as the micro-
Card 1/2   crystalloscopic investigation Since it is possible to use

Investigation and Application of Synthetic Organic   SOV/72 59-4-3/21
Silicates

the obtained products as glues and coatings at high tempera-
tures their behaviour in heating was thermographically in-
vestigated. For this purpose the self-recording pyrometer of
the Academician N S Kurnakov was used as well as the
torsion balance of the VT type. In these investigations the
authors refer to the papers by L M Khananashvili L V
Myshlyayeva, B M Mikhalev V Ye Shkol'nyy (Ref 3) The
characteristics of the products are given in the table. On
figures 1 3 5, and 6 the heating curves of the products
1, 2, 5, and 6 are plotted and on figures 2 4 and 7 the
curves of weight in heating of the products 1, 2 and 6 are
given. The crystallo-optical investigations were performed
on the basis of the paper by D S Belyankin V V Lapin
N A Toropov (Ref 4) As may be seen from the copyrights of
A P Kreshkov, L V Myshlyayeva, L M Khananashvili (Ref 5)
the hitherto used skin glue which is a shortage-good may be
replaced by a glue on the basis of synthetic silicates for the
gluing of tissues to grinding disks The products obtained may
be used in various fields of building and silicate material industry
Card 2/2   There are 7 figures 1 table and 6 Soviet references

MYSHLYAYEVA, L.V.; KOBYZSKAYA, G.V.

Investigation of the reactions of the interaction cf some silicones
with water suspensions of cements and clinker minerals. Trudy
MKHTI no.27:315-320 '59.   (MIRA 15:6)
          (Silicon organic compounds)   (Coment clinkers)

S/079/60/030/04/68/080
B001/B011

5.3700

AUTHORS: Kreshkov, A. P., Myshlyayeva, L. V., Khananashvili, L. M.

TITLE: Investigations in the Field of Aminosilanes. II. Methods of
Synthesizing Some Tetraalkoxy Silanes

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1347-1350

TEXT: The authors discuss the traditional methods of synthesizing tetra-
alkoxy silanes (Refs. 1-7). According to Ref. 4, the ternary mixture
$Si(OCH_3)_4-CH_3OH-HCl$ boils at 69°. These components react with one another
in two stages: 1) by reaction of HCl with the alcohol, under formation of
methyl chloride and water, 2) by the hydrolysis of ester by means of the
separated water until the precipitate $nSiO_2 \cdot mH_2O$ is formed. On analyzing the
reaction products with a lower boiling temperature than that of $SiORCl_3$, the
authors found them to contain considerable quantities of tetraalkoxy silanes
and alcohol. The change in the composition of low-boiling fractions with
temperature is represented in the form of a triangular diagram in the co-
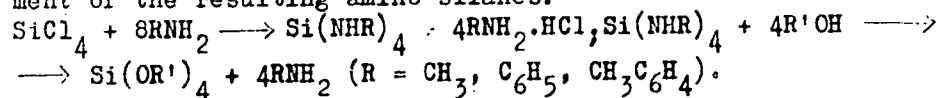ordinates $Si(OR)_4-CH_3OH-HCl$. Analytical and graphical data were similar for

Card 1/3

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Investigations in the Field of Aminosilanes.
II. Methods of Synthesizing Some Tetraalkoxy
Silanes

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some syntheses, which fact made it possible for this diagram to be used for the quick determination of the composition of the mixture by way of determining one component (HCl). Processes were investigated which take place in the synthesis of tetraalkoxy silanes. It was found that some esters of orthosilicic acid can be obtained in much better yields by a complementary treatment of the side products as are obtained in the esterification with $SiCl_4$. A new method of synthesizing tetraalkoxy silanes was worked out by reacting chlorosilanes with different amines with a subsequent alcoholic treatment of the resulting amino silanes:

$SiCl_4 + 8RNH_2 \longrightarrow Si(NHR)_4 \cdot 4RNH_2 \cdot HCl, Si(NHR)_4 + 4R'OH \longrightarrow$
$\longrightarrow Si(OR')_4 + 4RNH_2$ $(R = CH_3, C_6H_5, CH_3C_6H_4)$.

There are 1 figure and 14 references, 12 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I.
             Mendeleyeva (Moscow Institute of Chemical Technology imeni
             D. I. Mendeleyev)

Card 2/3

ACCESSION NR AM4008922   BOOK EXPLOITATION   S/

Kreshkov, A. P.; Bork, V. A.; Bondarevskaya, YE. A.; My*shlyayeva, L. V.;
    Syavtsillo, S. V.; Shemyatenkova, V. T.

Practical handbook on analysis of monomeric and polymeric silicones (Prakticheskoye
    rukovodstvo po analizu monomerny*kh i polimerny*kh kremniyorganicheskikh
    soyedineniy), Moscow, Goskhimizdat, 1962, 544 p. illus., biblio., index.
    Errata slip inserted. 6,000 copies printed.

TOPIC TAGS:monomeric silicone, polymeric silicone, silicon, carbon, quality control,
lacquer, enamel

PURPOSE AND COVERAGE: This book is a handbook on analysis of monomeric and poly-
meric silicone compounds. It gives the fundamentals of the theory and modern
chemical, physical, and physical-chemical methods of analyzing silicon compounds,
methods of determining their physical constants and structure, methods of analyzing
the basic chemical products used in their production, and also the methods used
in experimental and industrial facilities for quality control. The book is intended
for engineers, technicians, and researchers of research and plant laboratories and
also for students and graduate students in the field of elemento-organic compounds.

Card 1/2

43400

S/191/62/000/012/011/015
B101/B186

AUTHORS: Kreshkov, A. P., Myshlyayeva, L. V., Krasnoshchekov, V. V.

TITLE: Methods for determining silicon in organosilicon compounds
              and their comparative evaluation. Silicon determination in
              hydrolyzable organosilicon compounds

PERIODICAL: Plasticheskiye massy, no. 12, 1962, 51-55

TEXT: Si was determined gravimetrically, volumetrically and colorimetrically
in hydrolyzable organosilicon compounds of the general formula SiR_4, where
R is a methoxy to hexyloxy, phenyloxy, acetoxy, furfuryloxy or isothiocyanate
radical, also in polymers of these compounds and in resins modified with
these compounds. The utility of these analytic methods is compared.
(1) Gravimetric determination by hydrolysis and weighing of the calcined
SiO_2: Only the methoxy, phenoxy, acetoxy, furfuryloxy and isothiocyanate
compounds can be hydrolyzed quantitatively and with a satisfactory rate in
ammoniacal solution. Hydrolysis in HCl requires for the methoxy compound

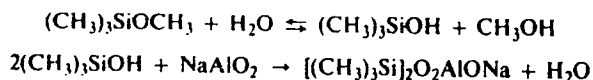Card 1/2

Methods for determining silicoh ...

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B101/B186

a HCl concentration of 1 : 10, for ethoxy and propoxy compounds 1 : 1, and for the higher radicals concentrated HCl. (2) The volumetric determination was performed according to L. Kalman, R. Vago (Magyar kem. folyoirat, 64, 123 (1958)): Hydrolysis of the substance analyzed with 40% aqueous-alcoholic HF solution, neutralization of H_2SiF_6 with

KOH, hydrolysis of K_2SiF_6 with $CaCl_2$ and iodometric HCl determination.

(3) Si was determined colorimetrically by treating the substance with 15% KOH and 5% ammonium molybdate, reduction with $Na_2SO_3 + Na_2SO_4$ and by colorimetry of the blue solution formed. Conclusion: For industrial laboratories and scientific research laboratories the volumetric method is recommended, since it requires little time (20-30 min) and its results almost equal those obtained in gravimetrical analysis. There are 7 tables.

Card 2/2

AUTHORS: Kreshkov, A. P., Myshlyayeva, L. V. and Soboleva, D. A.

TITLE: An investigation of the interaction of trimethyl-methoxysilane with an aqueous alkaline solution of sodium aluminate

PERIODICAL: Zhurnal obshchei khimii, v. 32. no. 7, 1962, 2190-2193

TEXT: The reaction of trimethyl-methoxysilane with sodium aluminate in an aqueous solution leads, under certain conditions, to the formation of a crystalline product, sodium bis-(triimethylsilyl)-aluminate. The reaction mechanism is described as:

$$(CH_3)_3SiOCH_3 + H_2O \rightleftarrows (CH_3)_3SiOH + CH_3OH$$

$$2(CH_3)_3SiOH + NaAlO_2 \rightarrow [(CH_3)_3Si]_2O_2AlONa + H_2O$$

A side reaction of condensation of trimethyl-silanol into hexamethyl-disiloxane takes place.

The method of preparation of sodium bis-(trimethylsilyl)-aluminate, and the product obtained, results of its structure determination by X-rays, its infra red spectrum, and its properties are given. It crystallises in the form of needles. The birefringent crystals are light polarising; could not be fused, and carbonised when heated. There are 3 figures and 1 table.

ASSOCIATION: Moskovskii khimiko-tekhnologicheskii institut im. D. I. Mendeleyeva (Moscow Chemical-Technological Institute im. D. I. Mendeleyev)

SUBMITTED: July 10, 1961

Card 1/1

KRESHKOV, A.P.; MYSHLAYAYEVA, L.V.; KHACHATURYAN, O.B.; KRASNOSHCHEKOV, V.V.

Conductometric analysis of silicon in organosilicon compounds.
Zhur. anal. khim. 18 no.11:1375-1379 N '63.   (MIRA 17:1)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni
D.I. Mendeleyeva.

L 18133-63
RM/WW/WAY   EWP(j)/EPF(c)/EWT(m)/BDS   AFFTC/ASD/ESD-3   Pc-4/Pr-4

ACCESSION NR: AP3004563   S/0032/63/029/008/0924/0926   7/

AUTHORS: Kreshkov, A. P.; My*shlyayeva, L. V.; Krasnoshchekov, V. V.

TITLE: Benzidine method for determination of silicon in some organic silicon compounds. Author's certificate No. 151858./ Bulletin of Inventions, No. 12 (1962)

SOURCE: Zavodskaya laboratoriya, v. 29, no. 8, 1963, 924-926

TOPIC TAGS: silane , silicone , benzidine, fluosilicic acid, fluosilicate

ABSTRACT: The method is based on the decomposition of monomeric and polymeric alkoxysilanes by 0.3-normal ethanol solution of hydrofluoric acid, and on the precipitation of the formed fluosilicic acid by benzidine. The complex is subsequently acidimetrically titrated. From 0.03-0.05 grams of the organic silicon compound are placed in a 150-200 ml polyethylene beaker containing 10 ml of a 0.3-normal ethanol solution of HF. The mixture is stirred for 2 minutes, and 10 ml of a 1% alcoholic solution of benzidine are added to it. The precipitate is separated on a filter and washed with alcohol. The filter is then placed in a 250-ml Erlenmeyer flask, to which 150 ml of hot water are added. The H_2SiF_6 is titrated with 0.1-normal KOH, using phenolphthalein as indicator. This procedure

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ACCESSION NR: AP3004563 $\mathcal{O}$

may be replaced by titration of the surplus HF. Both methods were tested on a
number of alkoxysilanes, providing a maximum error of 0.19%. The benzidine-
fluosilicate complex of the formula $C_{12}H_{12}N_2 \cdot H_2SiF_6$ forms crystalline needles
with double refraction and an extinction angle of 42°. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00   DATE ACQ: 26Aug63   ENCL: 00

SUB CODE: CH   NO REF SOV: 002   OTHER: 001

Card 2/2